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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/586,628	06/05/2000	Benjamin Chu	178-289	7768

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HOFFMANN & BARON, LLP  
6900 JERICO TURNPIKE  
SYOSSET, NY 11791

EXAMINER

EGWIM, KELECHI CHIDI

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 12/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/586,628

Applicant(s)

CHU ET AL.

Examiner

Dr. Kelechi C. Egwim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 11-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other:  |

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election of Group I, claims 1-10, in Paper No. 4 is acknowledged. Because applicant did not distinctly and specifically point out any errors in the restriction requirement, the election has been treated as an election **without** traverse (MPEP § 818.03(a)).

2. Claims 11-27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 3 recites "polyvinylalcohol PVA", however the "PVA" in this recitation should be enclosed within parentheses so as to avoid confusion with a polyvinylalcohol modified PVA.

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6. Claim 4 contains the trademark(s)/trade name(s) "Pluronics" as in EPE-type "Pluronics" originally owned by Wyandotte Chemical Corporation. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. **A trademark or trade name is used to identify a source of goods**, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademarks/trade names are used to identify/describe polymers, and accordingly, the identifications/descriptions are indefinite.

7. Also, while applicant may be his or her own lexicographer, a term in a claim may not be given a meaning repugnant to the usual meaning of that term. See *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). The term "P(DMA)/DEA" in claim 4 is used by the claim to mean "N,N-diethylacrylamide," while the accepted meaning is "a copolymer of N,N-dimethylacrylamide and N,N-diethylacrylamide."

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated over by Dubrow (USPN 5,164,055), Madabhushi et al. (USPN 5,567,292) or Hooper et al. (USPN 5,885,432).

In col. 3, lines 50-65 and col. 4, lines 40-44, Dubrow teaches a polymer solution containing a mixture of water-soluble polymers (which are correspondingly phase compatible), exemplified by polyacrylamide and polyethylene oxide (one of the “silica-absorbing polymers of the present claim 7), in a network for use in electrophoresis separation.

In col. 2, lines 34-55, col. 5, lines 20-23, examples 7 and 8 and Figure 5, Madabhushi et al. teach a polymer solution containing a mixture of water-soluble polymers (phase compatible), at least one representing a “silica-absorbing polymers” of the present claim 7, in a network for use in electrophoresis separation.

In col. 2, lines 61-67, col. 4, lines 8-67, col. 6, lines 5-32, and examples 4, 5, 7 and 8, Hooper et al. teach a polymer solution containing a mixture of water-soluble polymers (phase compatible), at least one representing a “silica-absorbing polymers” of claim 7, in a network for use in electrophoresis separation.

Thus, the requirements for rejection under 35 U.S.C. 102(b) are met.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 8-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, 35 U.S.C. 103(a) as being unpatentable over Dubrow, Madabhushi et al. or Hooper et al.

While Dubrow, Madabhushi et al. or Hooper et al. do not expressly teach the disclosed entanglement properties and base read lengths, it is reasonable that said properties in the polymer solutions of Dubrow, Madabhushi et al. or Hooper et al. would be the same as in the presently claimed solution since the composition of Dubrow, Madabhushi et al. or Hooper et al. are essentially the same as the claimed solution. The USPTO does not have at its disposal the tools or facilities deemed necessary to make physical determinations of the sort. In any event, an otherwise old composition is not patentable regardless of any new or unexpected properties. In re Fitzgerald et al , 619 F.2d 67, 205 USPQ 594 (CCPA 1980). See MPEP § 2112 - § 2112.02.

Regarding claim 9, while Dubrow, Madabhushi et al. or Hooper et al. do not expressly teach the polymer solutions to be prepared by synthesizing one polymer in the presence of the other, the products are still essentially the same as, or an obvious variant of a polymer solution produced by such a process, particularly since the

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polymers are not disclosed as being grafted onto each other. See *In re Marosi*, 218 USPQ 289 (Fed. Cir. 1983) and *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985). See also MPEP § 2113.

In any regard, even if assuming that the prior art references do not meet the requirements of 35 U.S.C. 102, it would still have been obvious to one of ordinary skill in the art, at the time the invention was made, to arrive at the same inventive composition because the disclosure of the inventive subject matter appears within the generic disclosure of the prior art. the presently claimed product.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kelechi C. Egwim whose telephone number is (703) 306-5701. The examiner can normally be reached on M-T (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703) 308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

A handwritten signature in black ink, appearing to be 'KCE', with a long horizontal flourish extending to the right.

KCE

October 30, 2002